Outside the Box and into the Air

A fragile idea to consider…..

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10/8/2016 updated 12/10/2016

Rural Air Oregon

Rural Air Oregon brand

A non-profit website and mobile app "Rural Air Oregon "is designed as a dynamic scheduling system to match passengers to flights. Its focus is on serving a small number of the 97 public use airports in Oregon. A Doodle type schedule would is used to match the most desired flight times / dates with the desires of the travelers. The more passengers per flight, the lower the cost. Customers can check the web schedule for the flights that best meet their time frame and cost criteria. Similar to scheduling a meeting for multiple attendees on Doodle, Appointly, and Vite.

Rural Air Oregon conforms to standards including the requirement that FAA Part 135 compliance for aircraft and pilots is met by the operators. Existing Part 135 operators participate and new operators who are interested can sign up as air service provider members. We are a scheduling resource for the existing Part 135 and any new Part 135 operators who choose to participate. We match available aircraft to requested flights. And the operators provide limited schedules to key cities and promote ridership on those flights.

It might be best for the State to limit the number of operators. This could be done with a competitive bid for three of the most qualified Part 135 companies to be selected. It might be beneficial for the Department of Aviation to establish the cost of tickets. Setting the cost of tickets and subsidizing on a per seat/ticket basis for established routes might ensure sustainability for the operators if passenger load projections are met. It is essential for the operators to remain profitable long term. And it would give the customers a known published price. The implementation for scheduled flights would be easier to standardize than for on-demand flights.

The web and app service is free to all operators who are part of the group for the first 3 years as the system matures. Then there will be a small fee per passenger to assist in the operational expenses. The web collects payment for passenger flights online via credit card. Revenue is automatically be distributed to the flight provider upon completion of the flight as is done with Uber / Lyft.

The website uses an on-demand posting and scheduling model similar to www.angelflightwest.org but with the addition of a scheduling feature that permits multiple passengers per flight. Based on this model, two Angel Flight members are planning to launch a Part 135 small aircraft commercial shuttle in Southern California.

Part 135 providers request membership in the pool. Once approved per published standards they are listed as an approved provider and can post available flights on the web. These show cities, time and distance, flying vs driving times, cost, transportation at the destination (airport cars, Uber, etc)

The concept of memberships for travelers can further reduce ticket prices. This provides rebates for those who have paid membership fees.

Communities can buy memberships. Local community auctions, taxes, bonds, and other local funds help reduce the ticket cost for individual locations. These funds go into a travel bank to be used to lower the ticket price for that community based on the amount of contribution to the travel bank.

All subsidies are on a per-seat basis, not on a per-flight basis. This provides an incentive for an operator to maximize ridership on a given flight, thus reducing the per-seat cost for the travelers. It would not operate on the Essential Air Service EAS model of subsidy per year or subsidy per flight.

Scheduled flights:
Locations such as Newport, La Grande, Roseburg and other locations can be selected and any of the approved Part 135 operators who choose could list flights that they desire to schedule to / from that location. HB2075 funds plus local funds would go into a travel bank to reduce the ticket price for the locations served. For example Salem to / from Newport three times per week initially could be a schedule to explore. Or, maybe PDX would be more practical, or both combined.

On demand flights:
A person wanting to fly can go online and request a flight. An email is immediately sent to all approved Part 135 operators. There is competition for pricing. Any subsidy would be evenly applied to the operator based on travel bank credits for locations that have travel banks.

An interested operator can pick up the flight on the website. If accepted, then that flight is booked and displayed online with number of passengers signed up for that date and time options. This is listed for specific day or it can be a range of times and days if the traveler's schedule is open - thus providing the flexibility for others to "vote" on the best day to get the most seats filled.

With the posted schedule (with at least 1 person committed to fly) then others can join that flight (Doodle type listing) If no others, the price remains higher.

For return flights:
The destination is shown as a departure flight available– usually within an hour of the arrival if all the incoming passenger(s) had been one-way for that day. This may assist in reducing empty returning flights. Emails could be sent to people who sign up to see flights that are becoming available to / from their specific towns. Technology gets the word out. Social media is also deployed.

Travel bank
There is an established overhead expense for operating the website organization. As a non-profit, any additional funds beyond operational costs that are received for memberships, auctions, HB2075 etc , are placed in the travel bank for use in reducing individual seats. This would be allocated based on local

investment where communities provide additional funding. For example for a city who has $20,000 per in their travel bank per year versus another who has $5,000 per year, it is allocated per seat on a prorata basis. Thus, communities with higher levels of contribution to the travel bank result in lower ticket prices when flying to / from that location.

The system encourages competition among Part 135 operators. They are organized to offer on-demand or limited schedules and they compete online based on available flights on given days to given locations. A single common dynamic website reduces the cost and confusion of multiple operators creating their own sites. This is like the difference of using Expedia or Travelocity to check on flights versus going to each individual airline. One stop shopping.

All payments are handled online ala the Uber model, Amazon and other modern ordering and payment systems. Scheduling flights and payments are done both on computers and all mobile devices with an app, similar to Uber .

The flyer requests the flight and the fee is charged to his card upon completion of the flight.

Ancillary systems including mobile apps such as Flight Aware or Fight Stats track flights (all are squawking discrete codes and using an N Number so it can be followed online) and ADS-B information will be used as it becomes available to display status in the air and arrival as well. Modern technology is put to maximum use.

Work flow

Passenger wants to fly from La Grande OR to Condon, OR.
Goes to web and selects a range of dates, times for a location from and to.
If flights exist within that parameter, they are displayed. A flight may not exist for that location. But is it does, as an inbound or outbound flight, the display would show time and distance and number of passengers and price for each date/time. (Doodle type selection). This flight is chosen, or the passenger could check back periodically to see if there are better rates based on day/time.

Once a passenger selects a flight, the passenger receives a confirmation vis email / text with all the details necessary, including FBO, location on field, plane and pilot, access to FBO, available ground transportation. Advertisements are available to increase cash flow into the travel banks, and these include hotels, restaurants, and local attractions at participating locations.

If flights do not exist –an email is instantly sent to all operator members and they can go online to show availability for that time/location and cost if they desire to pick up the flight request. This stays online whether the person selects the flight or not, because others may be going the same way.

The system can expand from a few locations on a scheduled basis to additional locations as demand grows. (4 flight per week to a specific location by one operator is FAA maximum under Part 135. Learning from the most often chosen routes allows operators to provision for them for better pricing and availability. Demand drives the system and locations like La Grande, John Day, Burns, Baker City and Newport have dynamically changing scheduled based on demand. Heuristically developed

schedule based on-demand year round flight requests are developed. Operators conform to actual historical times/days/locations that are most requested and provided, vs setting up a schedule and forcing the operator and passenger to conform to it. Technology provides the flexibility.

Aircraft type and size

Note: in 1998, the FAA changed the Part 135 requirements to allow specially equipped single engine turbine and piston aircraft to be flown under Instrument Flight Rules (in the clouds) IFR with revenue passengers. This was a reaction to commercial flights experiencing visual into obscured weather (VFR into IMC) flights, especially in Alaska with bad results. The FAA determined it is much safer to fly IFR. (FAA Parts 135.163 and 135.421) The Part 135 operators conform to these regulations using 4 and 6 place single engine aircraft. There are operators on the east coast and in other parts of the country using this size and type of aircraft. Single pilot IFR is FAA authorized if an autopilot is part of the aircraft systems . www.flyhopscotch.com and www.imagineair.com are operators flying small aircraft for passenger service. However, they are individual operators, each with its own online scheduling system not a dynamic pool as used by Rural Air Oregon to aggregate all operators into the most efficient system for both travelers and operators.

Rural Oregon cannot support large aircraft, there is not enough demand –at least initially- for more than 6 seats. Beech A-35, Cherokee 6, Piper Malibu, Cessna P-210, and Cirrus 22 are aircraft that can qualify. Cessna Caravan 208 and Pilatus PC12 are initially too large. Pendleton has been averaging only 4 passengers per flight in the 9 seat aircraft that fly their PDX route. Smaller works better for smaller communities.

We have 97 public use airports and 4,000 aircraft in Oregon. It would be ideal if we could get 4 aircraft flying to 4 locations 4 times per week within 4 years. 4x4x4x4 plan.

Promotion

Establishing rural air in a small community is analogous to opening a sushi bar in Madras. (maybe lots of interest, good surveys, but unknown actual demand and maybe no initial customers until it became the "in-thing" to do). Once a community decides on air service, it has to be heavily promoted, advertised, and also appearing in newspaper front page articles emphasizing the speed, times-saving, realistic cost, efficiency and safety. The mayor and community leaders need to be behind the effort. It will take 2 to 3 years before the flights are accepted by a local community as a reasonable option for travel versus their trucks. Auctions, airport days, demo flights, billboards, promotional items, Chamber of Commerce, city council involvement must be ongoing. A huge amount of the travel bank funds are needed to be spent to get ridership started, increased and sustained.

Website funding

A request will be made for website development and operational funding from ODA per HB2075 to go into a central travel bank. This is a legitimate use of rural air fuel tax funds. But, if that is not possible and is declined, other options would have to be explored.

The central travel bank funds the development and operation of the Rural Air Oregon website and mobile app until it reaches a point of success where a small per seat fee would be deducted from the

operators' fee payment. It will take an estimated 3 years before the web operation will be self-sufficient. However, the web may require ongoing subsidies depending on added features and use. Initial estimate on website costs would be $100k to develop and $100k per year to operate the web. Worst case, double that. But still, it would be only a very small percent of the fuel tax funding for a potential big positive result.

Expectations must be properly set

Airline passengers expect a 737 or 747 or Airbus 320 and more. Some are shocked when they have to fly on a tiny Canadair RJ or worse, a Dash 8 with propellers. Whew! Something to write home about. Passengers in more rural settings and especially in tourist locations like the east coast Martha's Vineyard, Nantucket and Cape Cod air shuttles have a different expectation level. A smaller plane is expected. And in Alaska anything with wings is fine with most flyers. So, expectations must be clearly set as to the type of aircraft and the type of flying, ie altitudes, headsets, ingress, egress, baggage and weight limits, etc. And turbulence. Like in boating, sometimes turbulence is to be expected and it is not life-threatening, and must be part of the briefing and the web must have detailed postings to set the expectation level. The same is ture with entering the clouds, it can cause discomfort with some people if not briefed and expected, vs an airliner where you can't see much. Most people will love it, some will not. Based on Angel Flight mission experiences, most all the first-time passengers flown in small planes have been delighted. And the repeat flyers are real pros. Flights are at levels low enough to see the beautiful countryside (5,000 to 12,000 above the ground level AGL, and they provide an experience much better than being stuck at 35,000 looking through a tiny window at nothing. Expectations, expectations, expectations- make all the difference.

Ground transportation

At airports where regular travel begins to materialize, rental car agencies provide vehicles. In smaller towns, the communities provide serviceable cars at a small fee. And, some airports provide free airport cars for the day. Each location has its specific resources listed on the web and some ground transportation modes can be added in addition to the ticket cost. And, Uber and Lyft, they are nearly everywhere.

FBO to FBO – No TSA

The rural model wil not support the overhead and time delays of TSA. All operations would be Fixed Base Operator FBO to FBO. Most airports have a facility which serves this purpose with and bathrooms, lounges, soda machines, food and friendly people. And, FBOs appreciate the additional fuel sales.

Competition – Expensive Traditional Part 135 charter webs

www.charterhub.com and others do not operate dynamically. When requesting a flight on one, the responses are emails and phone calls from operators asking, "Do you want food service", "How many flight attendants needed?", "do you prefer jet or piston, single or twin, what will you pay?". When the price is eventually quoted it ranges from $2,000 to $9,000 to fly one-way across Oregon. We need to have a ticket price that competes with driving (considering the time savings) and that means $100 to $500, typically $200 fly across the state one-way. This becomes possible with 4 and 6 seat single

engine aircraft, properly Part 135 operated, and with fuel tax subsidies and skin in the game from communities and operators to keep the price low.

This system allows Part 135 to compete on day one upon signup. It incents new operators to emerge and structure themselves to meet the developing use of rural air travel. Competition is encouraged in the free market with the non-profit Rural Air Oregon organization not playing any favorites. One shared POOL resource.

We have technical resources to maintain and improve the website. All operators must meet the requirements of FAA aircraft operations per Part 135. We conduct Part 135 operator meetings. We promote the service that attracts operators. As others join, they will pick routes that work best for them, matching plane size and schedules with works best for them at their location. For example it might be that an operator based in Burns wants to fly specific routes in their region that match their capabilities, and avoid others.

Studies and research

Millions could be spent on determining (guessing) at passenger demand. This would be a waste. Like the Madras sushi bar, it would be very difficult to predict the demand until operations begin and succeed for a period of time. Better to pick one or two airports and destinations that make sense based on existing Part 135 and airport and community guesses and try them – using dynamic online technology.

Traditional rural models (often with 30 seat and 9 seat aircraft) have not worked. Something totally different must be developed that has a chance of working. Studying previous rural models would create data based on sand, often quicksand.

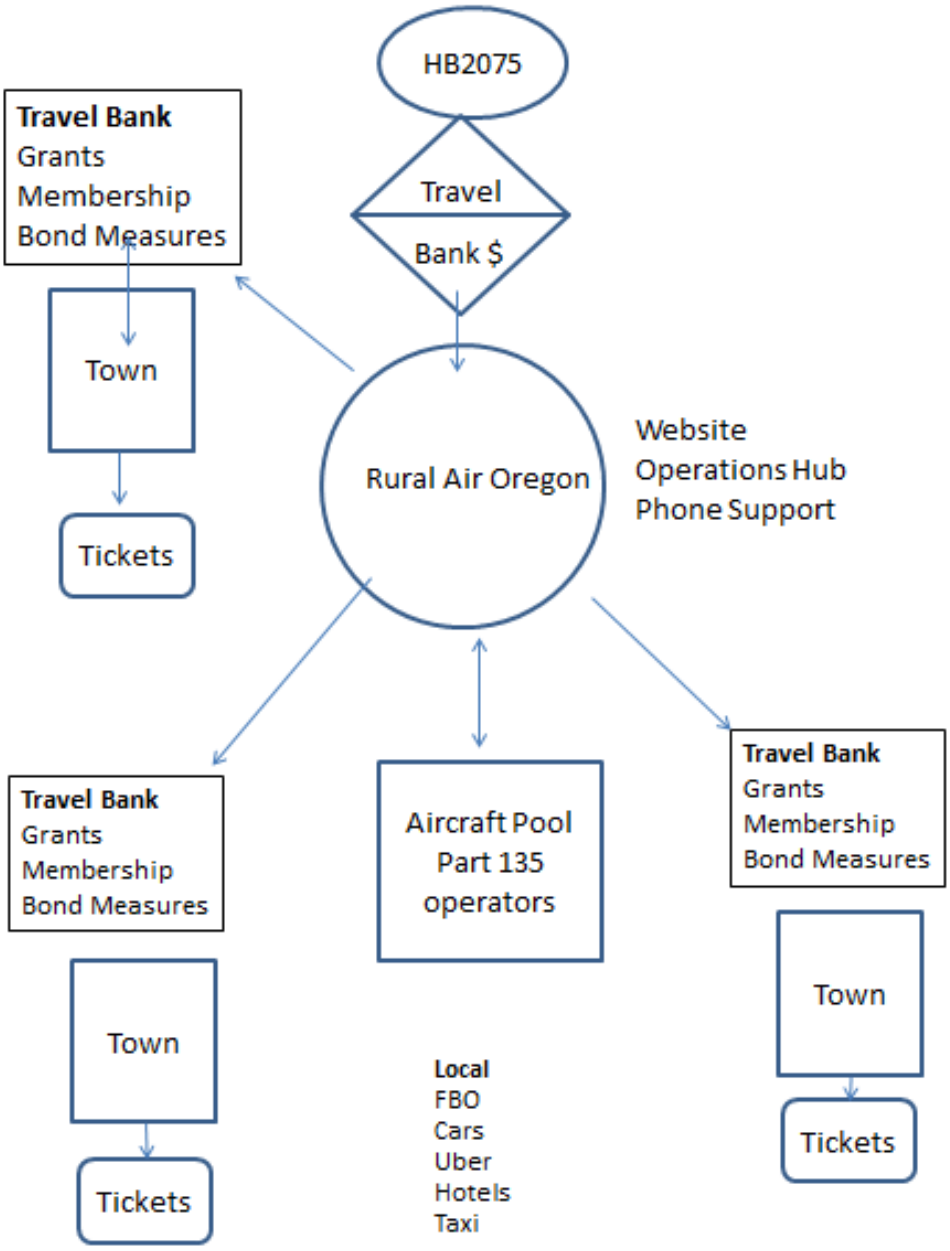
Communities must lead

Rural communities that desire air service will need to come together at their leadership levels to agree on what they initially want and then actively pursue all avenues to make it happen. Rural Air Oregon, ORAVI and ODA can provide the resources, connections and subsidies, but the proposal to move ahead, structure how they want it to work and to commit to local fund matching is essential to be done by the community to be served. They need to stand up to be counted.

Fly vs: drive & utilize our multi-million dollar existing assets

Oregon needs to get a few of our 4,000 aircraft out of their hangars and into the air to utilize our 97 airports across the state. And utilize the existing resources via technology and promotion and HB2075 subsidies per seat. And assist the Oregon Travel Forum OTF goals by getting more people off the road and into the air. As the time-worn saying goes: One mile of highway takes you one mile, one mile of runway can take you anywhere!

Diagram on next page…..



Strawman operations and flow.

www.RuralAirOregon.com How it might look.